

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) An apparatus for the treatment of a medical liquid, the apparatus comprising:

a liquid treatment machine and a cassette insertable therein, having a compartment configured to contain either one of first and second cassettes, the first cassette having the cassette including a rigid base body with fitted a first chamber chambers and passages, and a foil that covers the chambers first chamber and passages, the second cassette having a rigid base body with first and second chambers and passages, and a foil that covers the first and second chambers and passages, the first chamber of the first cassette positioned to correspond to the first chamber of the second cassette, and the second chamber of the second cassette positioned to correspond to a region of the first cassette that does not include a chamber, and

the liquid treatment machine including actuators and sensors first and second actuators, the first actuator being aligned with the first chamber of the first cassette when the first cassette is disposed in the compartment of the liquid treatment machine, the first actuator being aligned with the first chamber of the second cassette when the second cassette is disposed in the compartment of the liquid treatment machine, the second actuator being aligned with the region of the first cassette that does not include chamber when the first cassette is disposed in the compartment of the liquid treatment machine, and the second actuator being aligned with the second chamber of the second cassette when the second cassette is disposed in the compartment of the liquid treatment machine for the operation of the apparatus with the inserted cassette such that cassettes can be inserted in different integration shapes;

wherein the liquid treatment machine is adapted so that the first actuator and not the second actuator is operated when the first cassette is disposed in the compartment of the liquid

treatment machine and both the first and second actuators are operated when the second cassette is disposed in the compartment of the liquid treatment machine a surface of a machine block and of the cassette is in each case divided into a plurality of surface regions (A, B), with components of the actuators or sensors to be coupled being accommodated in one surface which is common as a basic variant to all cassettes and wherein further surfaces are contained in which actuators or sensors are arranged.

2. (Currently Amended) The apparatus in accordance with claim 1, wherein the easette is cassettes are disposable.

3. (Currently Amended) The apparatus in accordance with claim 1, wherein the easettes first cassette can be used for ~~different application purposes~~ a first type of treatment, and the second cassette can be used for a second type of treatment, the first type of treatment being different than the second type of treatment.

4. (Currently Amended) The apparatus in accordance with claim 3, wherein the application purposes are liquid treatment machine is adapted to perform any one of standard hemodialysis, online hemodiafiltration, or online hemofiltration, or and acute treatment.

5. (Currently Amended) The apparatus in accordance with claim 1, wherein the each cassette has a molded handle at a side of the rigid base body of the cassette.

6. (Currently Amended) The apparatus in accordance with claim 5, wherein a dialyzer is integrated at the side of the base body of the each cassette, with it simultaneously the dialyzer forming the handle.

7. (Currently Amended) The apparatus in accordance with claim 1, wherein the liquid treatment machine has a frame to which a door is fitted and in which the machine block is guided, with the door and the machine block being alignable with respect to one another such

that either of the easette cassettes can be received between the door and the machine block in a sealed manner.

8. (Currently Amended) The apparatus in accordance with claim 7, further comprising a pressing actuator system that provides an air cushion to move the machine block toward the closed door for the sealing reception of one of the easette cassettes.

9. (Previously Presented) The apparatus in accordance with claim 7, wherein the machine block includes valves, and further comprising an air distributor plate with integrated passages that adjoins the machine block and that is configured to conduct compressed air and/or a vacuum from corresponding pneumatic connections to the actuators and the valves in the machine block.

10. (Currently Amended) The apparatus in accordance with claim 1, wherein ~~at least one centering recess is cut out in the easette which engages into~~ the liquid treatment machine includes at least one projection at a frame side arranged to fit into a centering recess defined in at least one of the cassettes when the at least one of the cassettes is disposed in the compartment of the liquid treatment machine, and the liquid treatment machine includes at least one stop means is provided which fixes arranged to fix the at least one of the cassettes easette on a surface of the machine block when the at least one of the cassettes is disposed in the compartment of the liquid treatment machine.

11. (Previously Presented) The apparatus in accordance with claim 1, wherein a door can be latched to a frame after the door is closed, with the latched state being monitorable via sensors.

12. (Currently Amended) The apparatus in accordance with claim 1, wherein an elastic mat is arranged between one of the easette cassettes and the machine block when the one of the cassettes is disposed in the compartment of the liquid treatment machine.

13. (Currently Amended) The apparatus in accordance with claim 12, wherein the elastic mat has recesses for a pump chamber to be provided and mat passages which extend along liquid-carrying passages of one of the easette cassettes when the one of the cassettes is disposed in the compartment of the liquid treatment machine.

14. (Previously Presented) The apparatus in accordance with claim 1, wherein sensor modules are integrated in the liquid treatment machine for the determination of the parameters of the medical liquid to be treated and which are each designed in pairs and of which one part of the pair is installed in the machine block and the other part in a door.

15. (Currently Amended) The apparatus in accordance with claim 1, wherein a venting unit is integrated in the liquid treatment machine which can be coupled to a gas-permeable membrane integrated in one of the easette cassettes when the one of the cassettes is disposed in the compartment of the liquid treatment machine.

16-28. (Cancelled)

29. (Currently Amended) The apparatus according to claim 10, wherein the stop means is a snap-in hook.

30. (Cancelled)

31. (New) The apparatus in accordance with claim 1, wherein the liquid treatment machine comprises a sensor adapted to distinguish the first cassette from the second cassette when the cassettes are disposed in the compartment of the liquid treatment machine.

32. (New) The apparatus in accordance with claim 31, wherein the sensor comprises a barcode reader arranged to read a barcode on the first cassette when the first cassette is disposed in the compartment of the liquid treatment machine and arranged to read a barcode on the second

cassette when the second cassette is disposed in the compartment of the liquid treatment machine.

33. (New) The apparatus in accordance with claim 1, wherein at least one of the actuators is a pump.

34. (New) The apparatus in accordance with claim 1, wherein at least one of the actuators is a valve.

35. (New) The apparatus in accordance with claim 1, wherein the liquid treatment machine and the first cassette are adapted to perform standard hemodialysis when the first cassette is disposed in the compartment of the liquid treatment machine.

36. (New) The apparatus in accordance with claim 1, wherein the liquid treatment machine and the second cassette are adapted to perform online hemodiafiltration when the second cassette is disposed in the compartment of the liquid treatment machine.

37. (New) The apparatus in accordance with claim 1, further comprising the first and second cassettes.

38. (New) A system for the treatment of a medical liquid, the system comprising:  
first and second cassettes, the first cassette having a rigid base body with a first chamber and passages, and a foil that covers the first chamber and passages, the second cassette having a rigid base body with first and second chambers and passages, and a foil that covers the first and second chambers and passages, the first chamber of the first cassette positioned to correspond to the first chamber of the second cassette, and the second chamber of the second cassette positioned to correspond to a region of the first cassette that does not include a chamber; and  
a liquid treatment machine having a compartment configured to contain either one of the first and second cassettes, the liquid treatment machine comprising first and second actuators, the first actuator being aligned with the first chamber of the first cassette when the first cassette is

disposed in the compartment of the liquid treatment machine, the first actuator being aligned with the first chamber of the second cassette when the second cassette is disposed in the compartment of the liquid treatment machine, the second actuator being aligned with the region of the first cassette that does not include a chamber when the first cassette is disposed in the compartment of the liquid treatment machine, and the second actuator being aligned with the second chamber of the second cassette when the second cassette is disposed in the compartment of the liquid treatment machine,

wherein the liquid treatment machine is adapted so that the first actuator and not the second actuator is operated when the first cassette is disposed in the compartment of the liquid treatment machine and both the first and second actuators are operated when the second cassette is disposed in the compartment of the liquid treatment machine.

39. (New) The system in accordance with claim 38, wherein the base body of each cassette is formed of polypropylene.

40. (New) The system in accordance with claim 38, wherein the cover foil of each cassette is formed of a polyolefin elastomer mixture.

41. (New) The system in accordance with claim 38, wherein a venting chamber is formed by a molding in the base body of each cassette and by the cover foil of each cassette, and the cover foil can be sucked into a recess formed in the liquid treatment machine.

42. (New) The system in accordance with claim 38, wherein the first chamber of each cassette is a pump chamber, and the actuator of the liquid treatment machine that aligns with the first chamber is a pump.

43. (New) The system in accordance with claim 42, wherein the pump chamber has an inlet and an outlet that are substantially tangential to each other.

44. (New) The system in accordance with claim 43, wherein the pump chamber has a shape of a spherical section and wherein a standing bead is formed such that a flushing passage is formed between an upper edge of the base body of the cassette and the cover foil in a pressing-out phase.

45. (New) The system in accordance with claim 44, wherein a spherical surface of the pump has a smaller radius than the pump chamber such that a flushing passage is formed between the spherical surface of the pump and the pump chamber when the pump is inserted into the pump chamber.

46. (New) The system in accordance with claim 38, wherein each of the cassettes further comprises at least one measuring chamber that has a shape of a diffuser nozzle.

47. (New) The system in accordance with claim 38, wherein wherein the base body of each cassette comprises an edge bead along all passages and chambers, and the edge bead faces the cover foil.

48. (New) The system in accordance with claim 38, wherein the base body of each cassette is welded to the cover foil at an outer edge and wherein a substitute-carrying region in the cassette is surrounded by a weld seam.

49. (New) The system in accordance with claim 38, wherein each cassette is operable in a two-needle or a single-needle operation.

50. (New) The system in accordance with claim 38, wherein the liquid treatment machine and the first cassette are adapted to perform standard hemodialysis when the first cassette is disposed in the compartment of the liquid treatment machine.

51. (New) The system in accordance with claim 38, wherein the liquid treatment machine and the second cassette are adapted to perform online hemodiafiltration when the second cassette is disposed in the compartment of the liquid treatment machine.

52. (New) The system in accordance with claim 38, wherein the cassettes are disposable.

53. (New) The system in accordance with claim 38, wherein the first cassette can be used for a first type of treatment, and the second cassette can be used for a second type of treatment, the first type of treatment being different than the second type of treatment.

54. (New) The system in accordance with claim 53, wherein the liquid treatment machine is adapted to perform any one of standard hemodialysis, online hemodiafiltration, online hemofiltration, and acute treatment.

55. (New) The system in accordance with claim 38, wherein at least one of the actuators is a valve.

56. (New) A set of medical fluid cassettes, comprising:  
a first cassette having a rigid base body with a first chamber and passages, and a foil that covers the first chamber and passages; and  
a second cassette having a rigid base body with first and second chambers and passages, and a foil that covers the first and second chambers and passages,  
wherein the first chamber of the first cassette is positioned to correspond to the first chamber of the second cassette, the second chamber of the second cassette is positioned to correspond to a region of the first cassette that does not include a chamber, the first chamber of the first cassette is positioned to align with a first actuator of a liquid treatment machine when the first cassette is disposed within a cassette compartment of the liquid treatment machine, the first chamber of the second cassette is positioned to align with the first actuator of the liquid



treatment machine when the second cassette is disposed within the cassette compartment of the liquid treatment machine, the region of the first cassette that does not include a chamber is positioned to align with a second actuator of the liquid treatment machine when the first cassette is disposed within the cassette compartment of the liquid treatment machine, and the second chamber of the second cassette is positioned to align with the second actuator of the liquid treatment machine when the second cassette is disposed within the cassette compartment of the liquid treatment machine.

57. (New) The set of medical fluid cassettes in accordance with claim 56, wherein the cassettes are disposable.

58. (New) The set of medical fluid cassettes in accordance with claim 56, wherein the first cassette can be used for a first type of treatment, and the second cassette can be used for a second type of treatment, the first type of treatment being different than the second type of treatment.

59. (New) The set of medical fluid cassettes in accordance with claim 56, wherein the first cassette is configured for standard hemodialysis.

60. (New) The set of medical fluid cassettes in accordance with claim 56, wherein the second cassette is configured for online hemodiafiltration.

61. (New) The set of medical fluid cassettes in accordance with claim 56, wherein each of the cassettes forms at least one centering recess positioned to receive a projection of the liquid treatment machine when the cassette is disposed in the cassette compartment of the liquid treatment machine.

62. (New) The set of medical fluid cassettes in accordance with claim 56, wherein each of the cassettes includes a bar code thereon to identify the cassette.